



# Nibrin (phospho Ser278) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-00188
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;IF;ELISA
<b>Gene Name</b>	NBN
<b>Protein Name</b>	Nibrin
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Nibrin around the phosphorylation site of Ser278. AA range:251-300
<b>Specificity</b>	Phospho-Nibrin (S278) Polyclonal Antibody detects endogenous levels of Nibrin protein only when phosphorylated at S278.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	NBN; NBS; NBS1; P95; Nibrin; Cell cycle regulatory protein p95; Nijmegen breakage syndrome protein 1
<b>Observed Band</b>	95kD
<b>Cell Pathway</b>	Nucleus . Nucleus, PML body . Chromosome, telomere . Chromosome . Localizes to discrete nuclear foci after treatment with genotoxic agents (PubMed:26438602, PubMed:10783165, PubMed:26215093). Acetylation of 'Lys-5' of histone H2AX (H2AXK5ac) promotes NBN/NBS1 assembly at the sites of DNA damage (PubMed:26438602). .
<b>Tissue Specificity</b>	Ubiquitous (PubMed:9590180). Expressed at high levels in testis (PubMed:9590180).
<b>Function</b>	disease:Defects in NBN are a cause of genetic susceptibility to breast cancer (BC) [MIM:114480]. BC is an extremely common malignancy, affecting one in eight women during their lifetime. A positive family history has been identified as major contributor to risk of development of the disease, and this link is striking for early-onset breast cancer.,disease:Defects in NBN are the cause of Nijmegen breakage syndrome (NBS) [MIM:251260]. NBS is an autosomal recessive syndrome characterized by chromosomal instability, radiation sensitivity, microcephaly, growth retardation, immunodeficiency and predisposition to cancer, particularly to lymphoid malignancies.,disease:Defects in NBN may be associated with aplastic anemia [MIM:609135]. Aplastic anemia is a disease of bone-marrow



failure characterized by peripheral pancytopenia and marrow hypoplasia. Most of the cases of aplastic anemia are idiopa

**Background**

Mutations in this gene are associated with Nijmegen breakage syndrome, an autosomal recessive chromosomal instability syndrome characterized by microcephaly, growth retardation, immunodeficiency, and cancer predisposition. The encoded protein is a member of the MRE11/RAD50 double-strand break repair complex which consists of 5 proteins. This gene product is thought to be involved in DNA double-strand break repair and DNA damage-induced checkpoint activation. [provided by RefSeq, Jul 2008],

**matters needing attention**

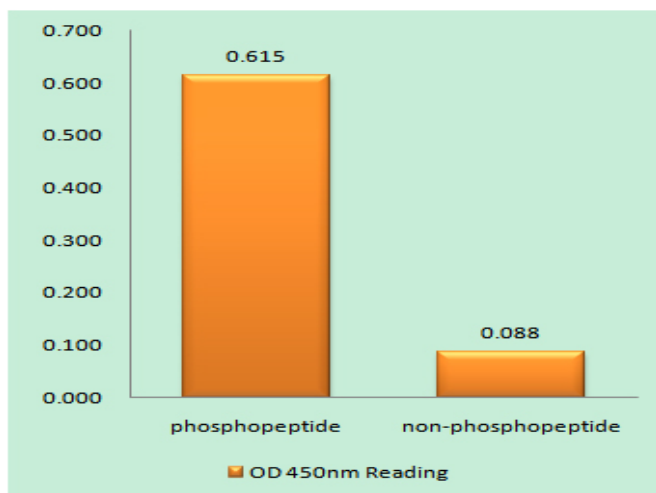
Avoid repeated freezing and thawing!

**Usage suggestions**

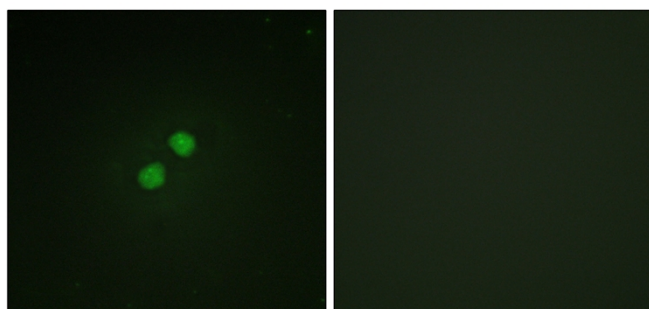
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



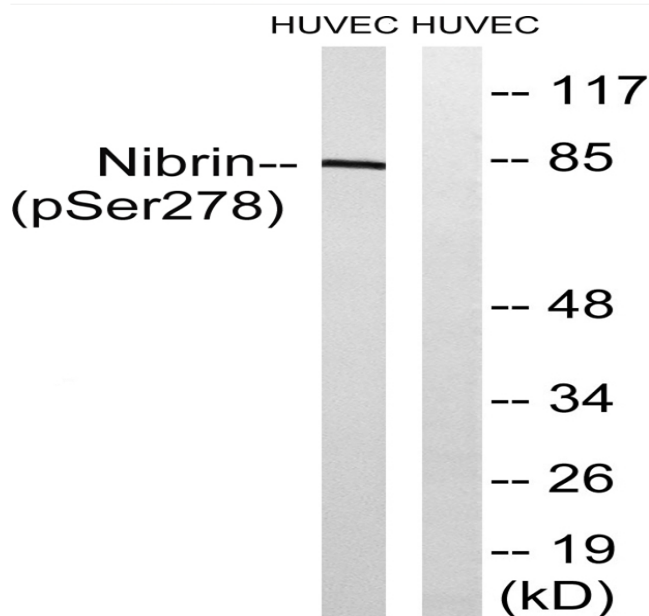
## Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Nibrin (Phospho-Ser278) Antibody



Immunofluorescence analysis of NIH/3T3 cells, using Nibrin (Phospho-Ser278) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HUVEC cells treated with Forskolin 40nM 30', using Nibrin (Phospho-Ser278) Antibody. The lane on the right is blocked with the phospho peptide.